Hydrologic Outlook

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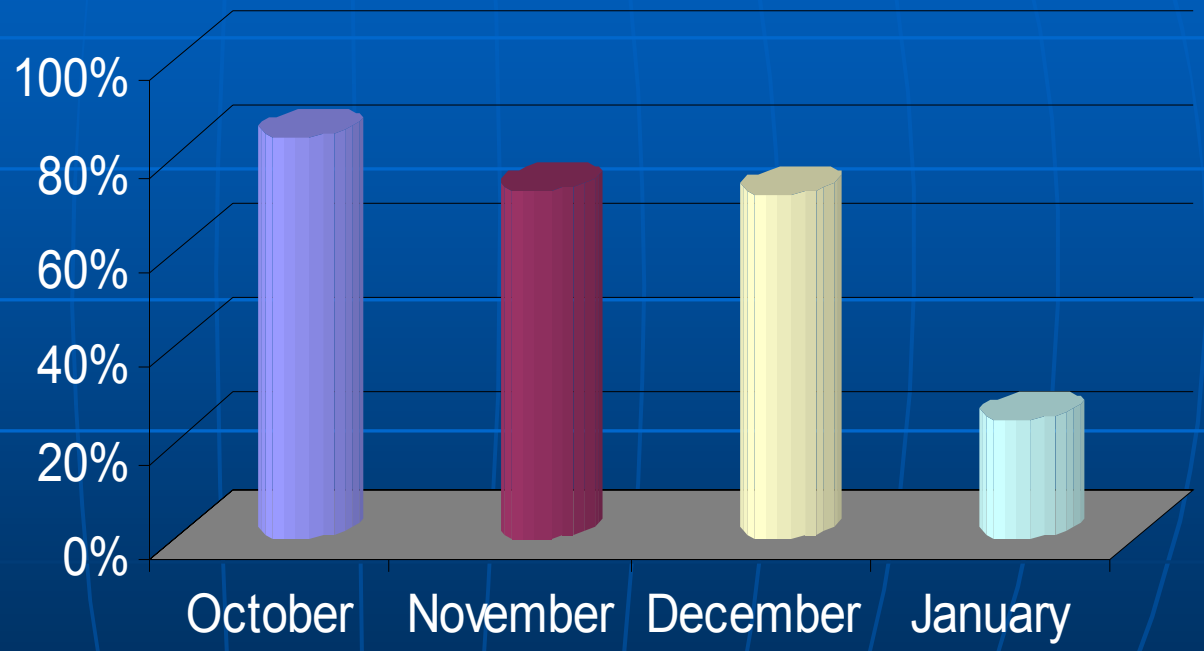
February

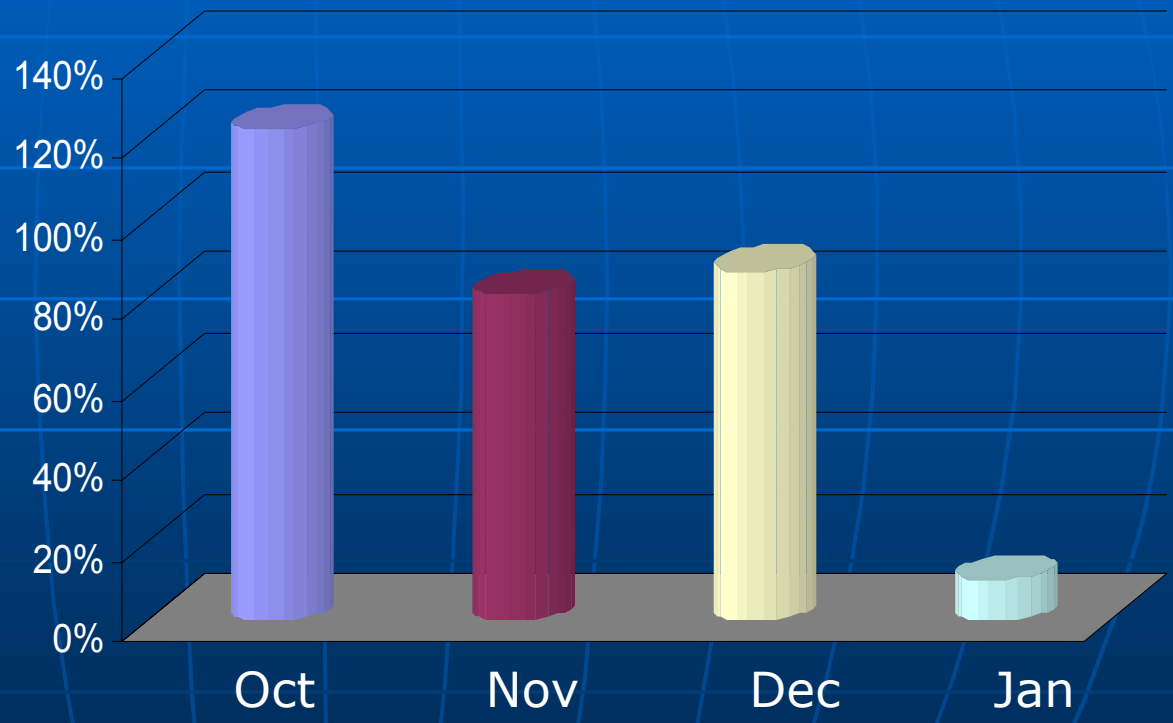
Great Basin Precipitation

- Oct. 84%
- Nov. 73%
- Dec. 72%
- Jan. 40%



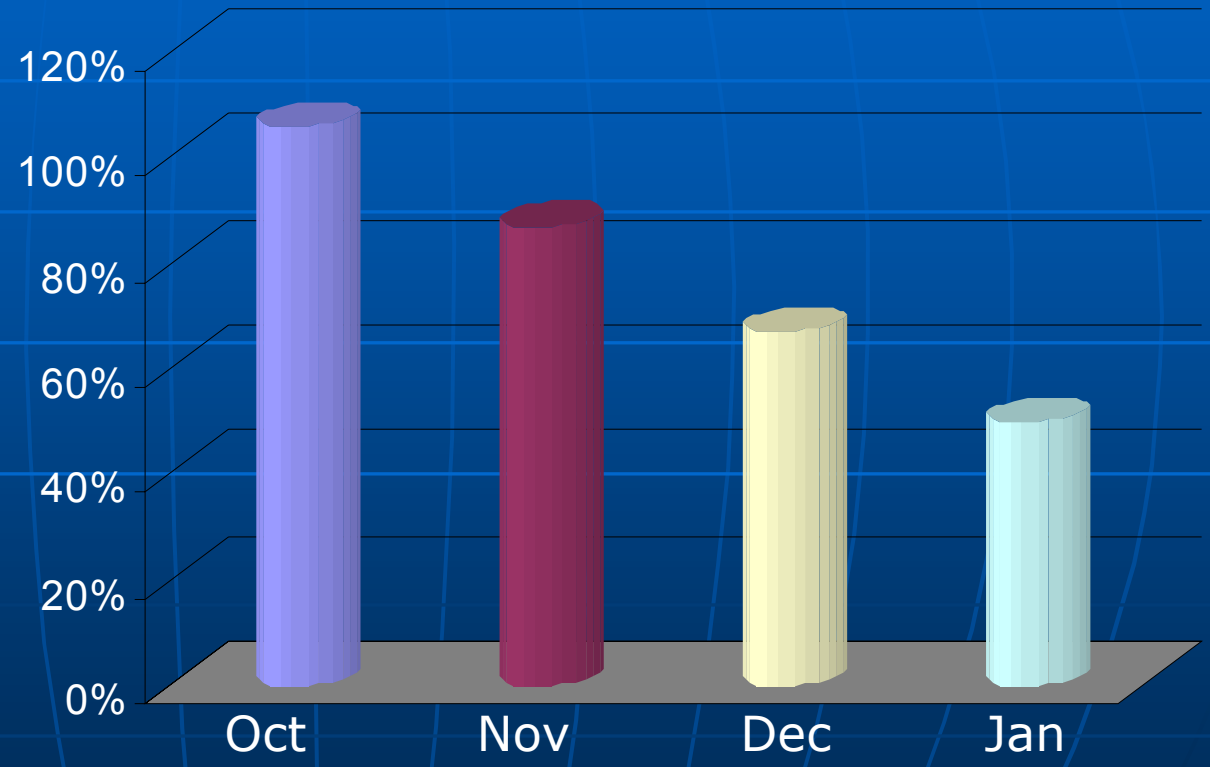
Sevier River Basin Precipitation

- Oct. 122%
- Nov. 81%
- Dec. 87%
- Jan. 30%



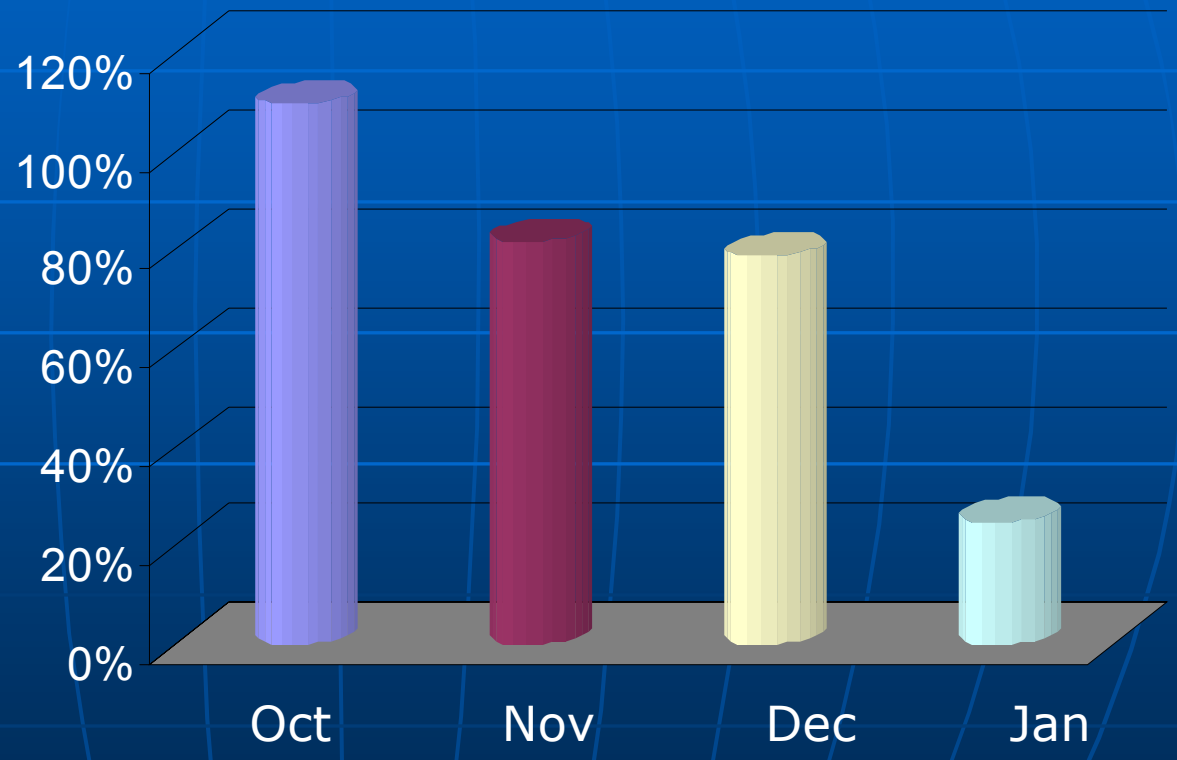
Green River Basin Precipitation

- Oct. 106%
- Nov. 87%
- Dec. 67%
- Jan. 50%



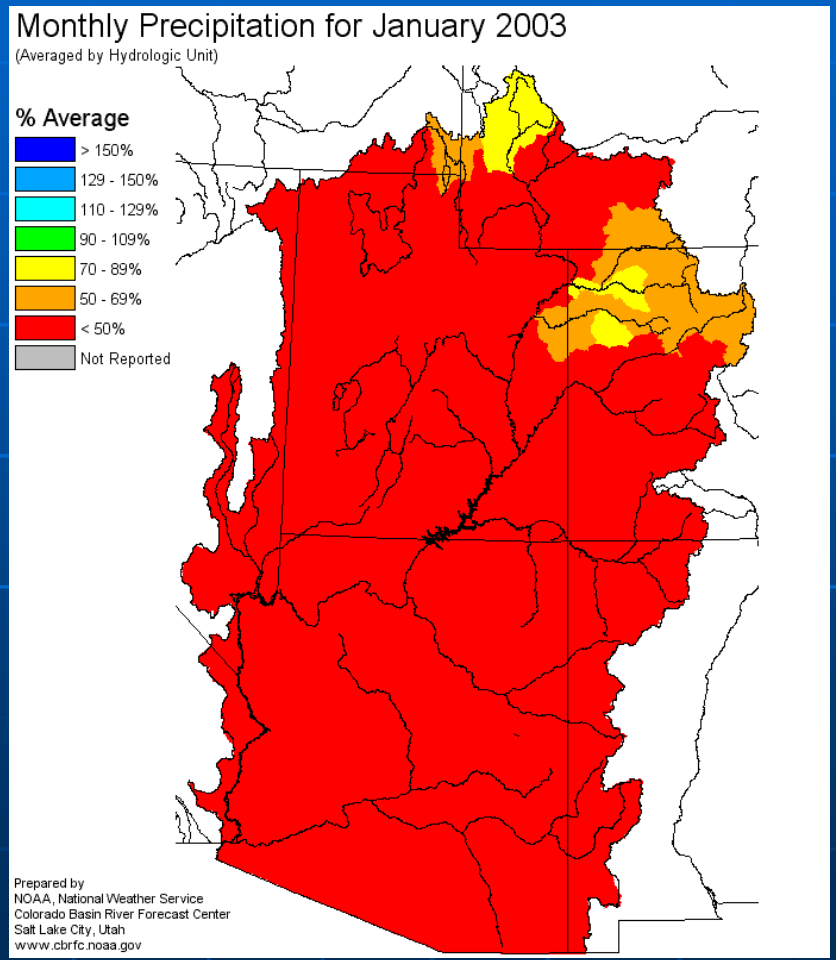
Virgin River Basin Precipitation

- Oct. 110%
- Nov. 82%
- Dec. 79%
- Jan. 25%



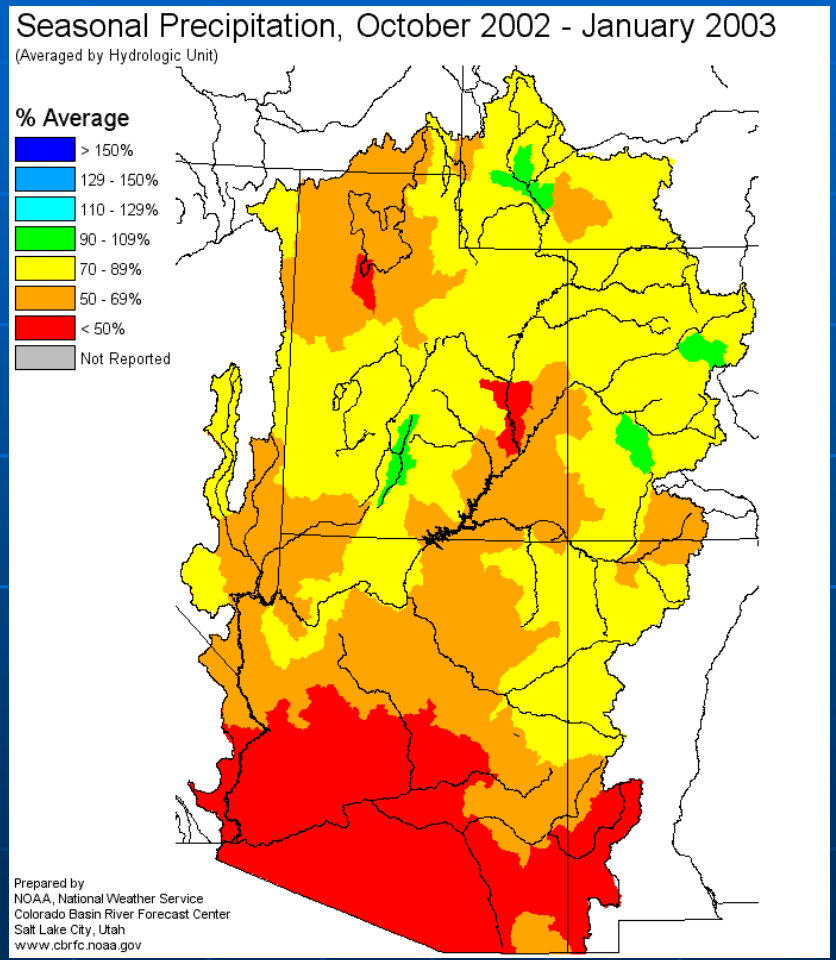
Graphical Precipitation Map
January 2003
Utah and Surrounding Area

- Utah area received much below normal precip
- Less than 50% of normal



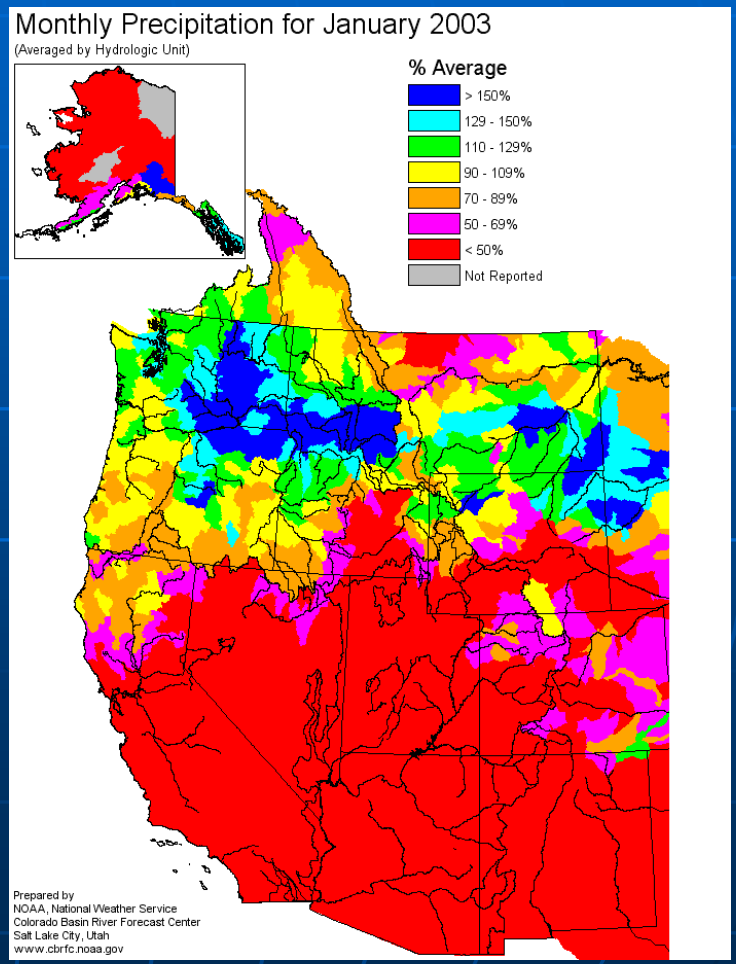
Graphical Precipitation Map
October through January
Utah and Surrounding Area

- Wasatch Front received 50-69% of normal
- Central Utah received 70-89% of normal
- Overall, a lack of precipitation when we need above average amounts



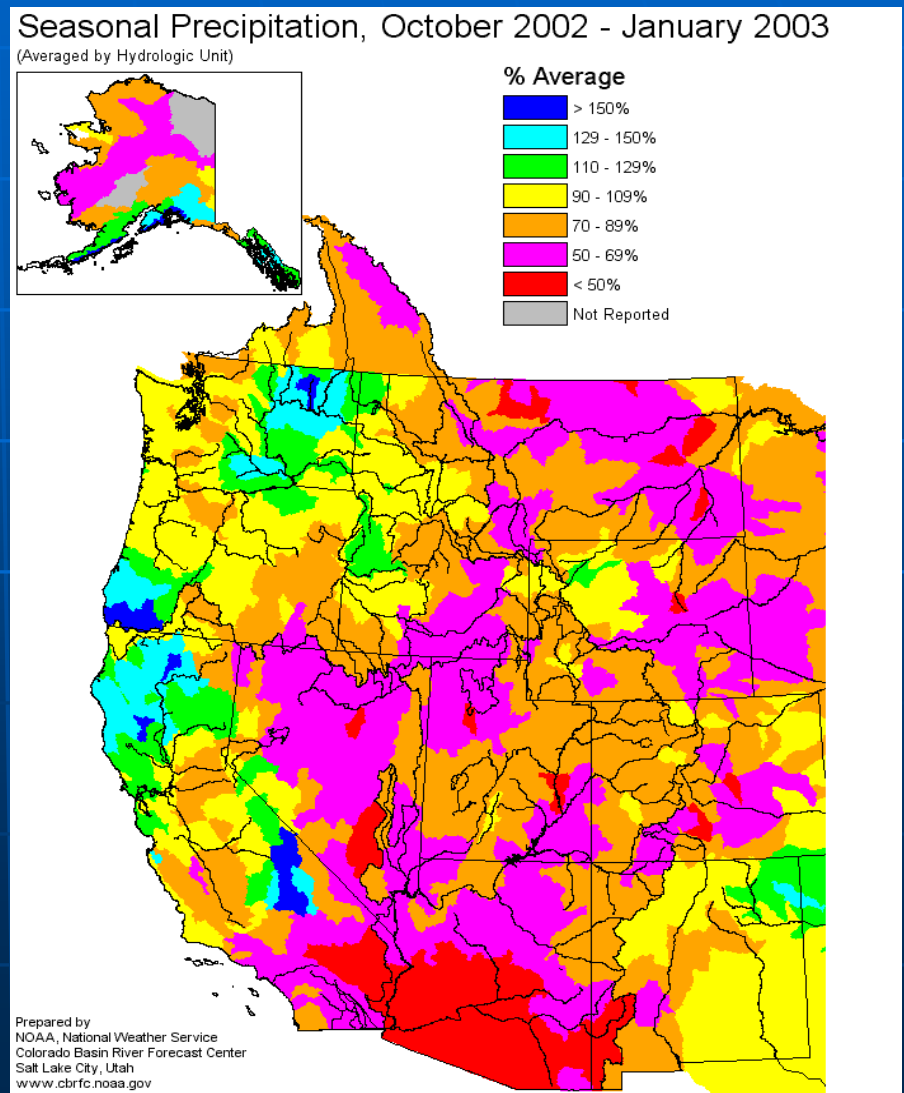
Graphical Precipitation Map
January 2003
Western U.S.

- Eastern Washington, Northern Idaho received the most precipitation in the region
- High Pressure deflected Jet stream and storm track to the north

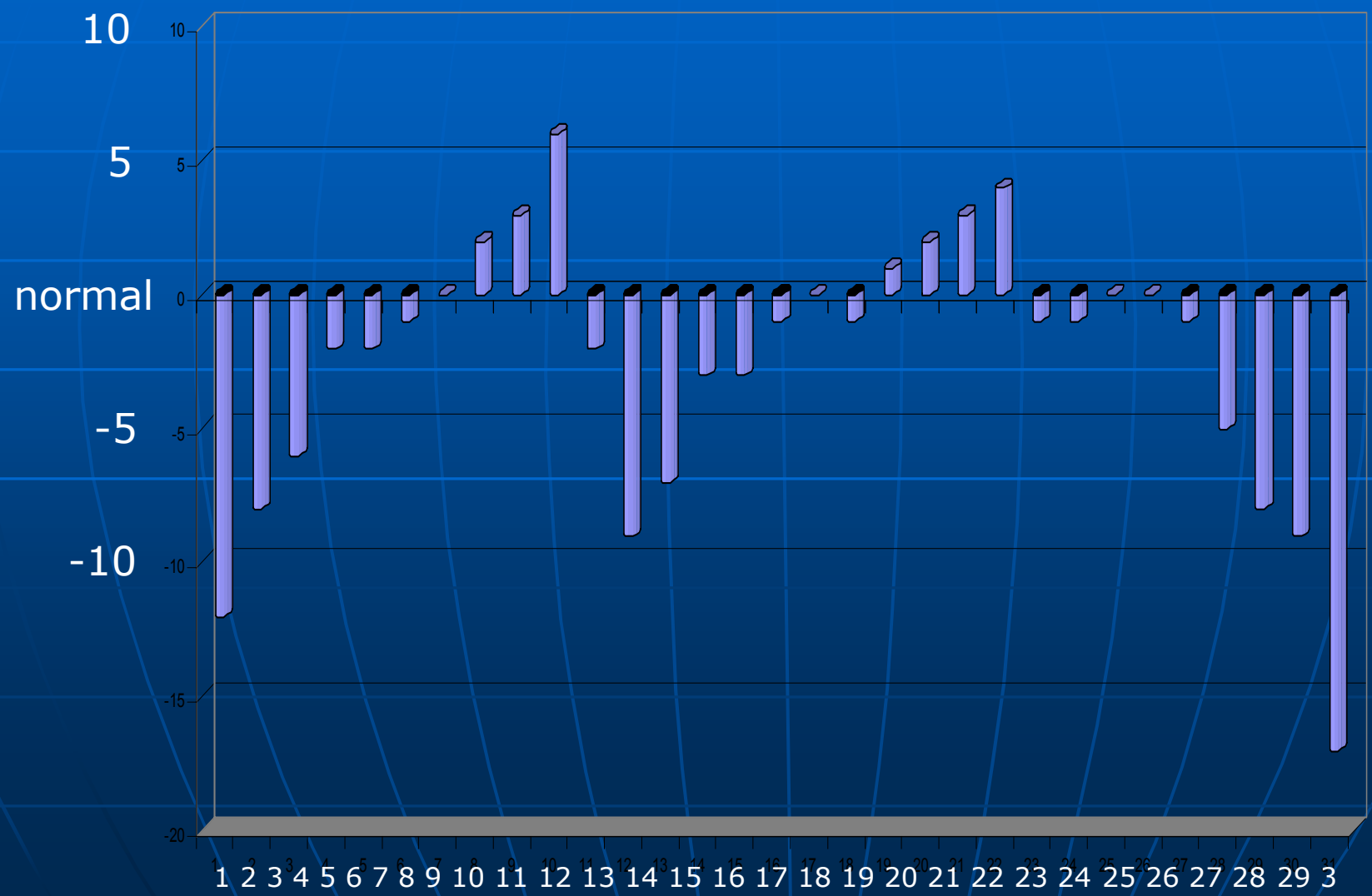


Graphical Precipitation Map
October through January
Western U.S.

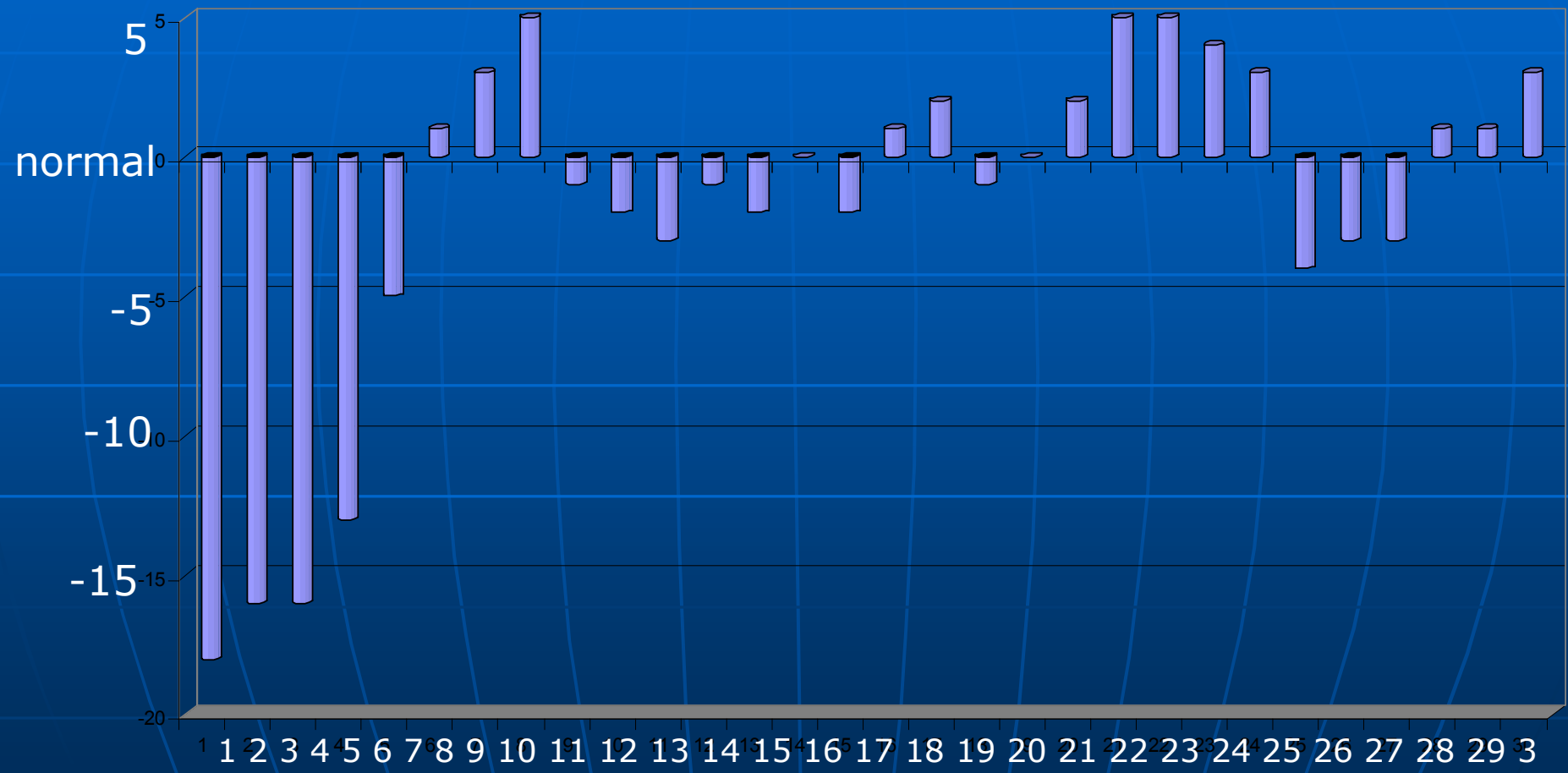
- Seasonal precipitation amounts were greater in areas northwest of Utah
- Most of the west recorded below average amounts



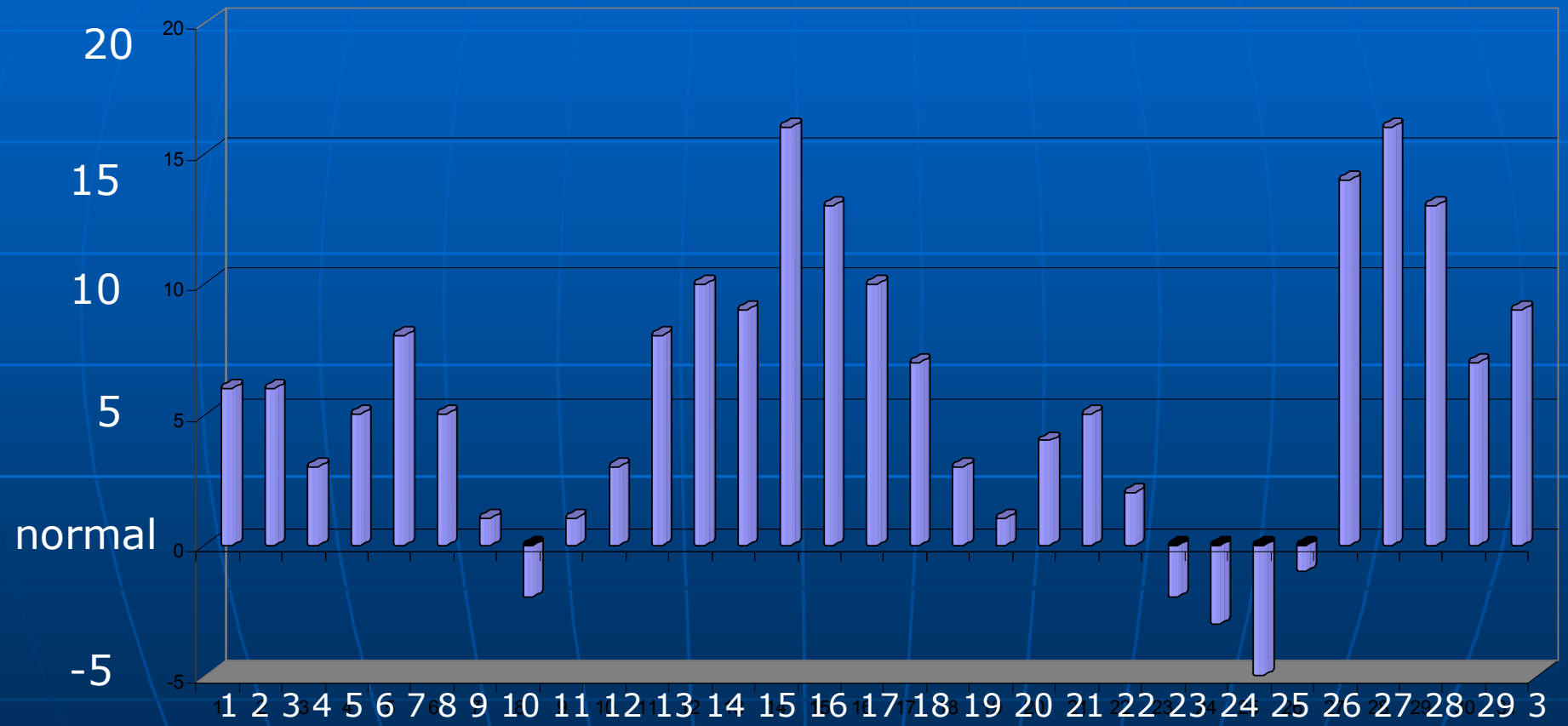
October Temperature Departure From Normal (SLC)



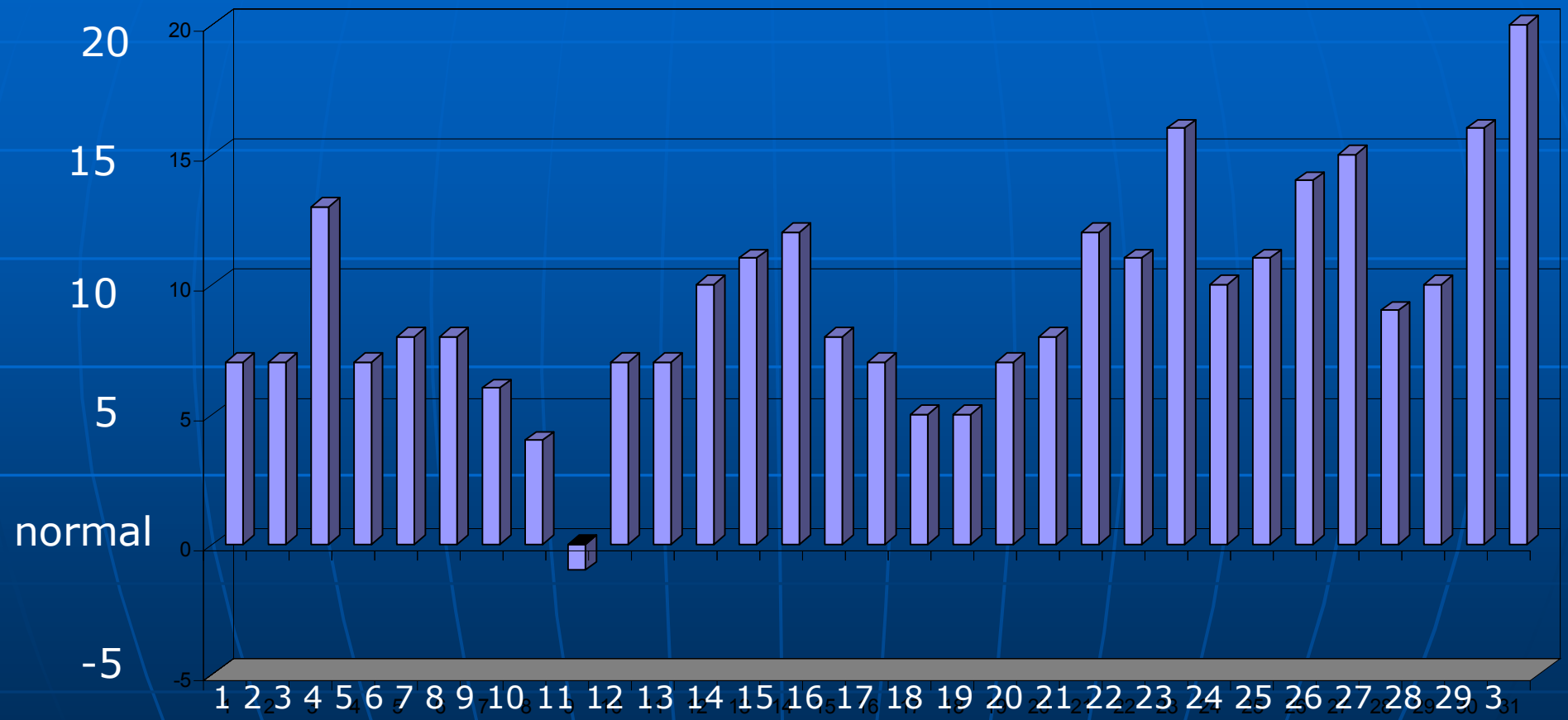
November Temperature Departure From Normal (SLC)



December Temperature Departure From Normal (SLC)

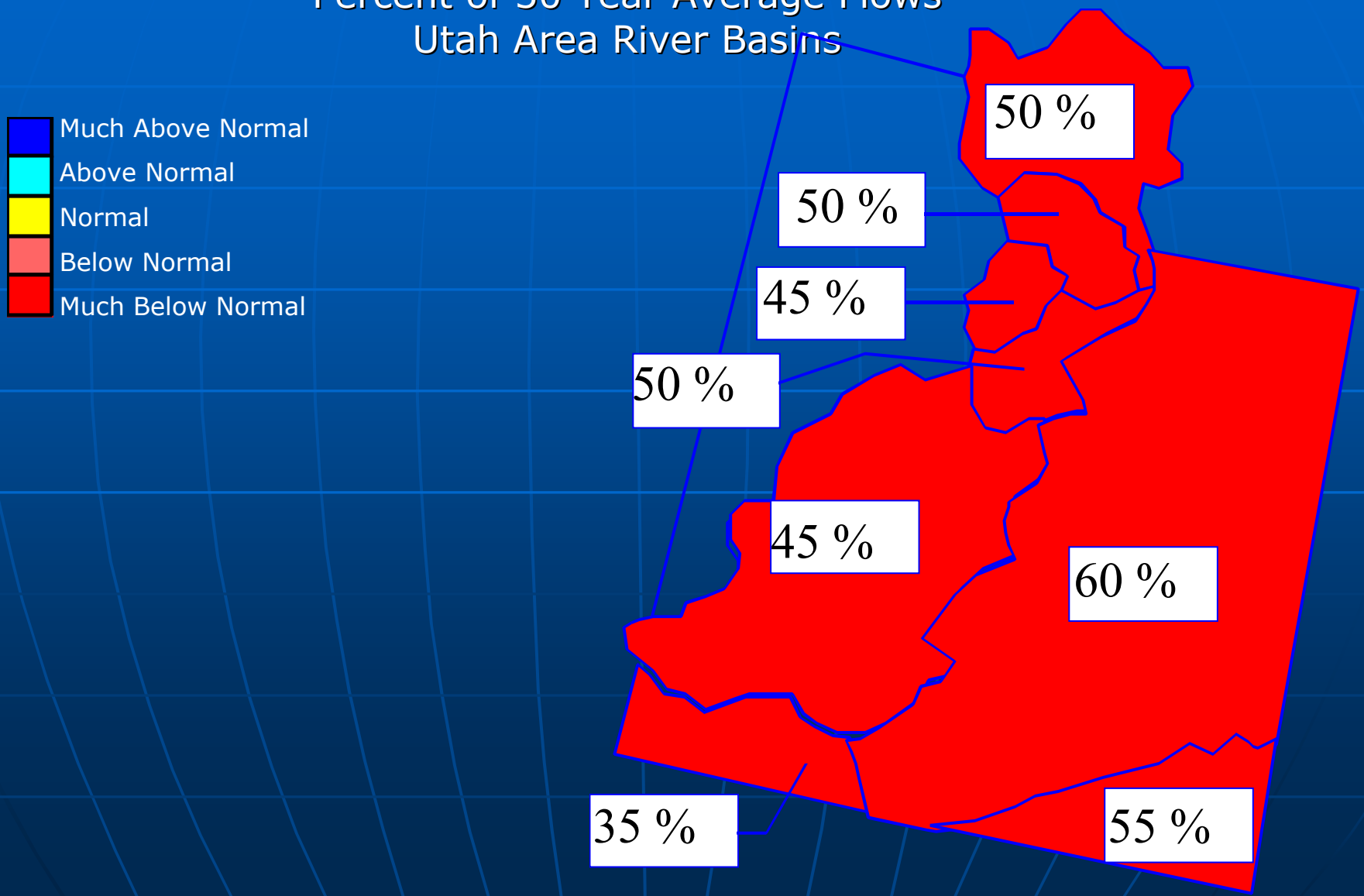


January Temperature Departure From Normal (SLC)



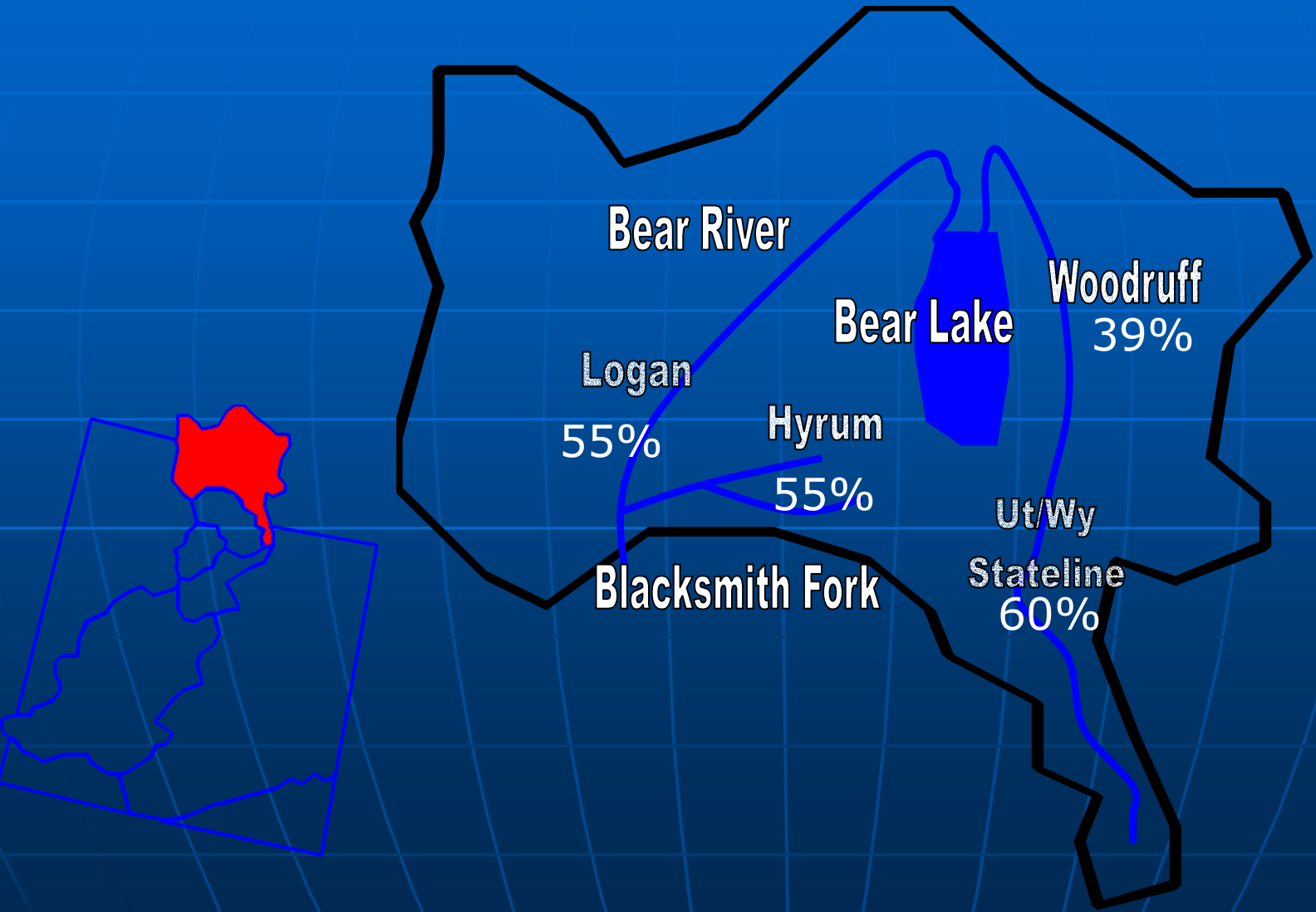
Forecasted Utah Spring Snowmelt Runoff Volume

February 1st 2003
April Through July Volume Forecast
Percent of 30 Year Average Flows
Utah Area River Basins



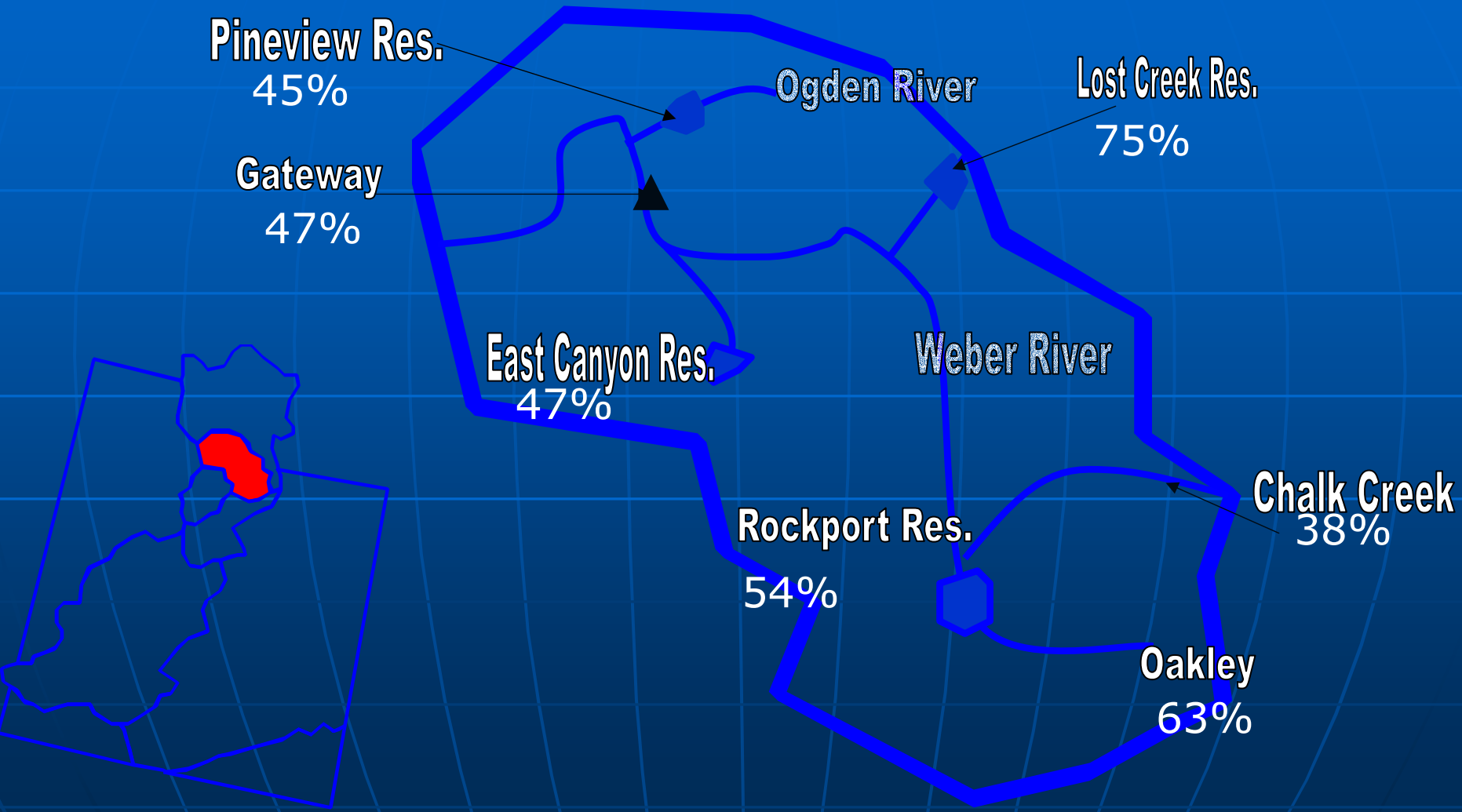
Forecasted Utah Spring Snowmelt Runoff Volume

February 1st 2003
April Through July Volume Forecast
Percent of 30 Year Average Flows
Bear River Basin



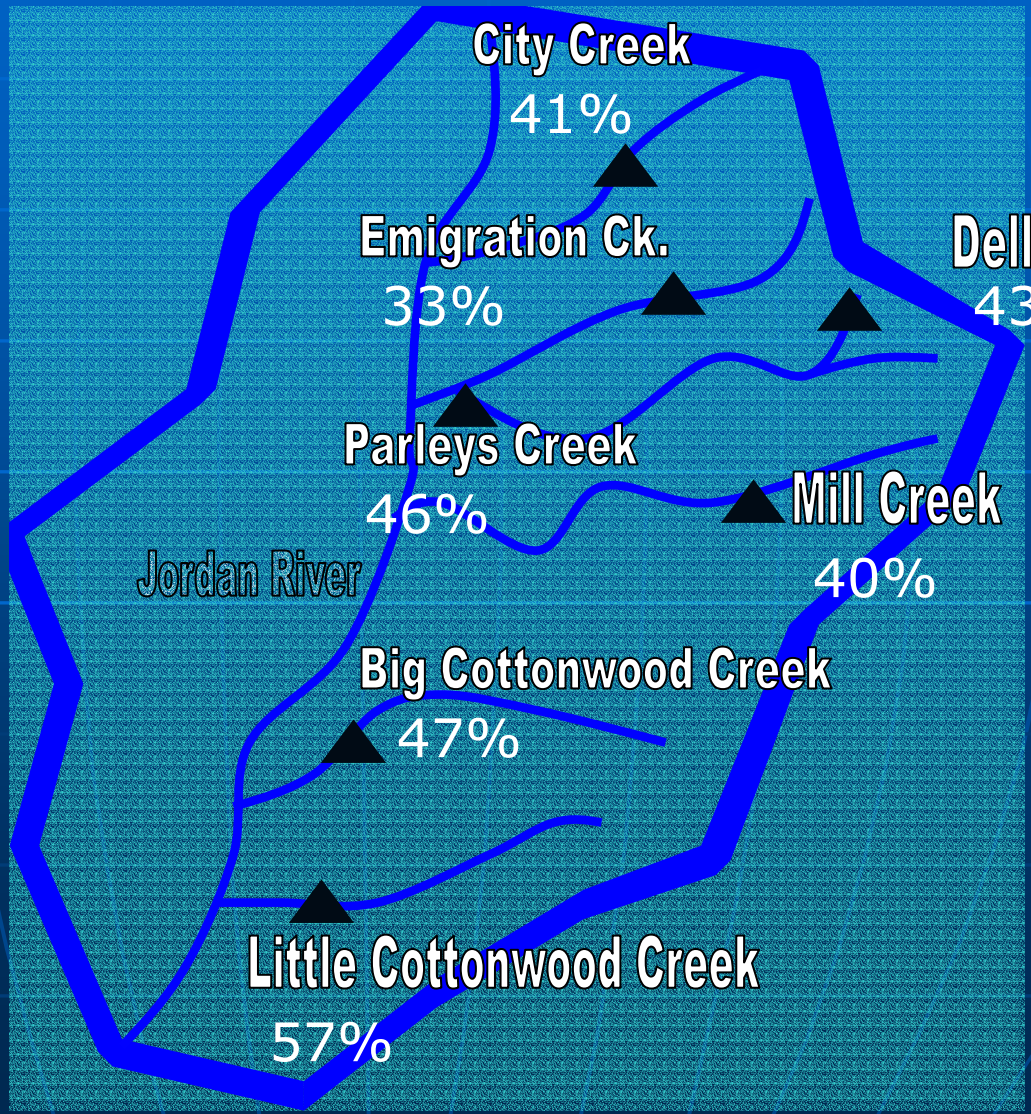
Forecasted Utah Spring Snowmelt Runoff Volume

February 1st 2003
April Through July Volume Forecast
Percent of 30 Year Average Flows
Weber River Basin



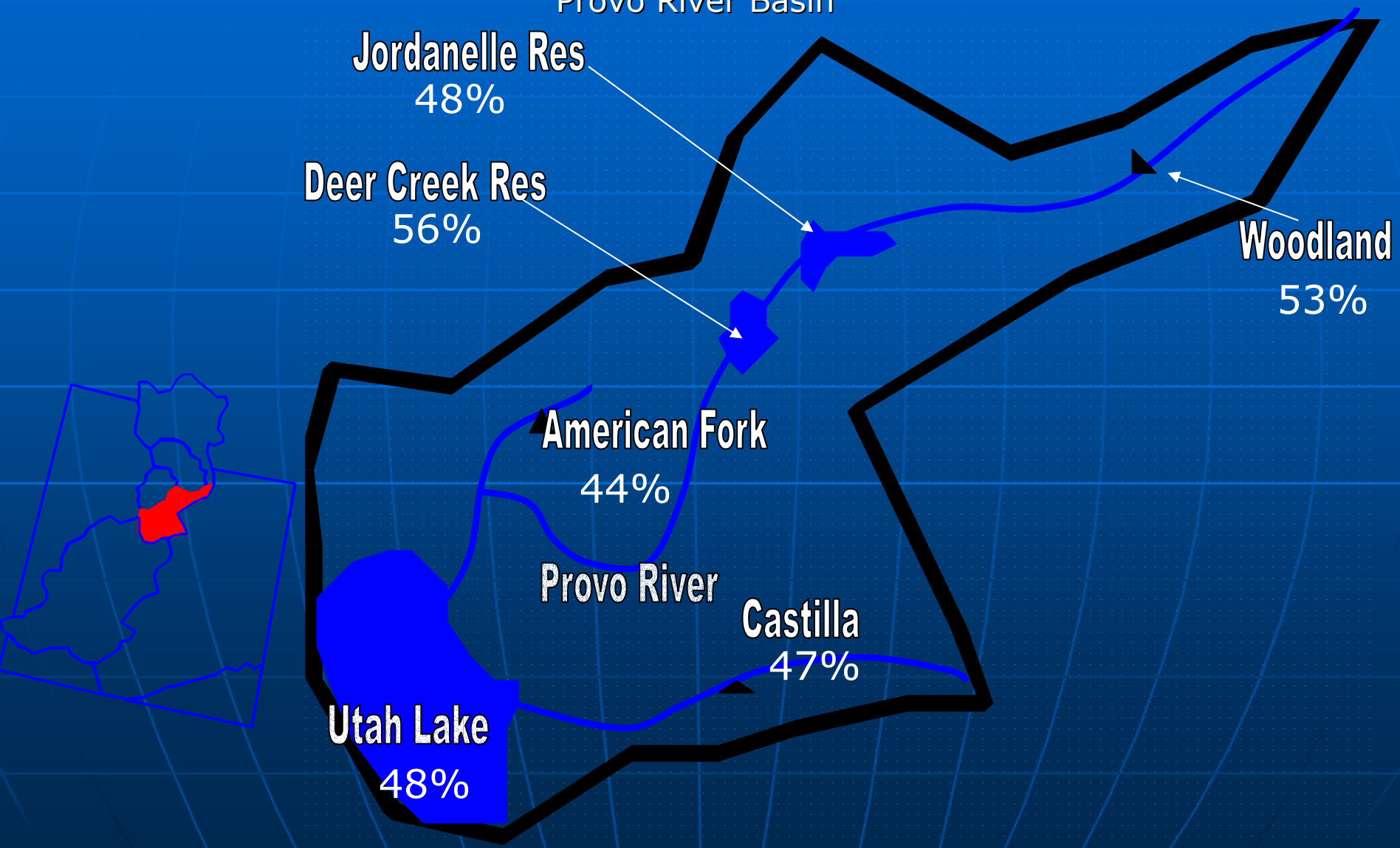
Forecasted Utah Spring Snowmelt Runoff Volume

February 1st 2003
April Through July Volume Forecast
Percent of 30 Year Average Flows
Six Creeks River Basin



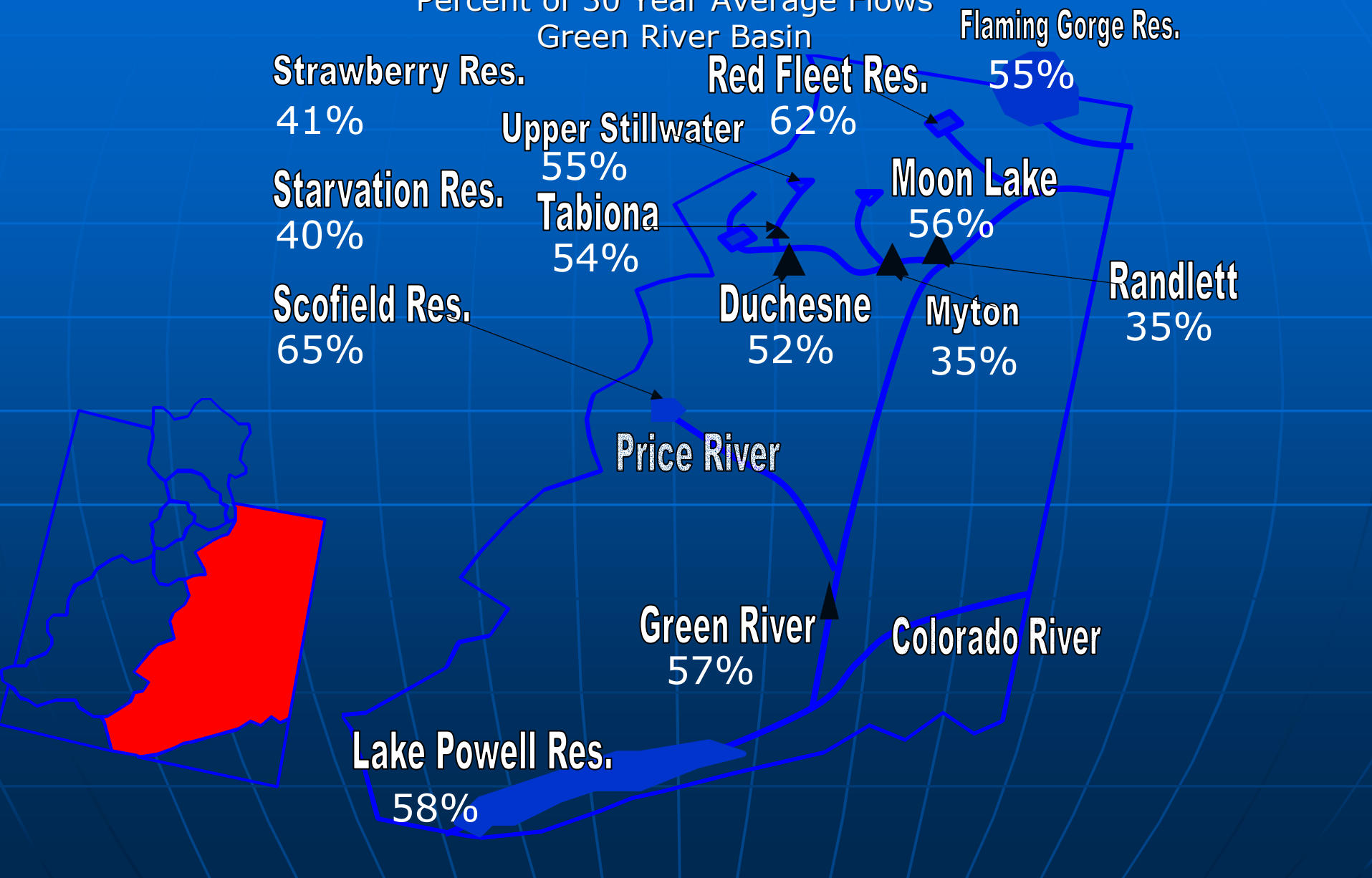
Forecasted Utah Spring Snowmelt Runoff Volume

February 1st 2003
April Through July Volume Forecast
Percent of 30 Year Average Flows
Provo River Basin



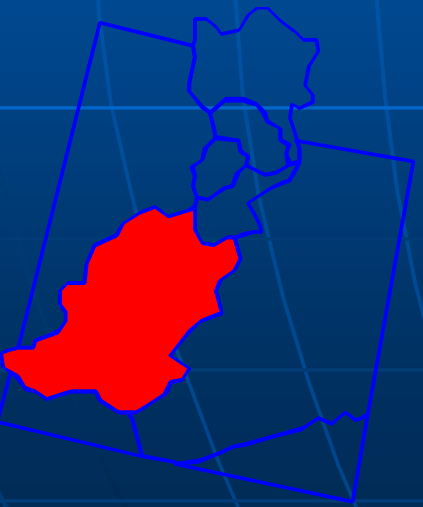
Forecasted Utah Spring Snowmelt Runoff Volume

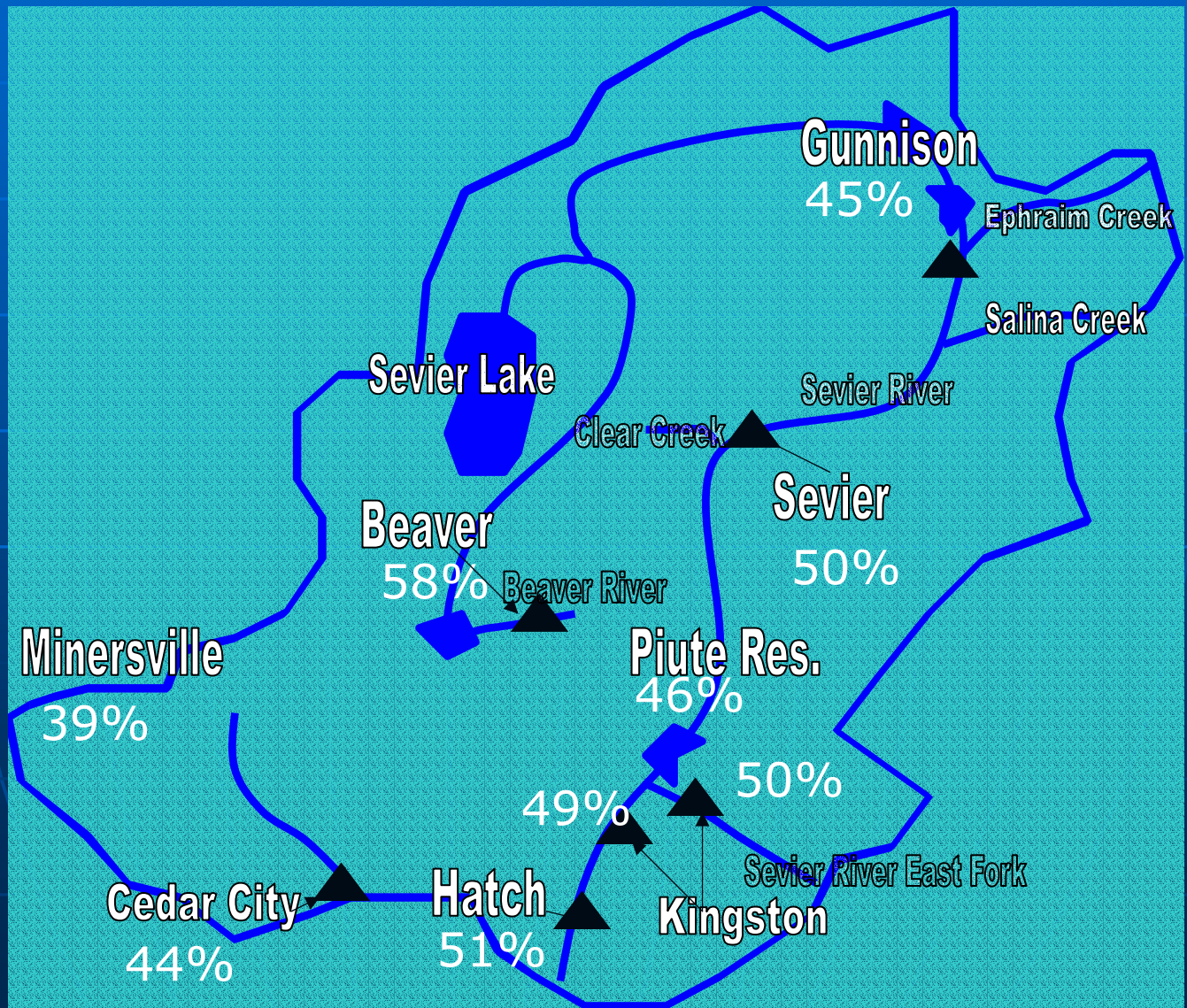
February 1st 2003
April Through July Volume Forecast
Percent of 30 Year Average Flows
Green River Basin



Forecasted Utah Spring Snowmelt Runoff Volume

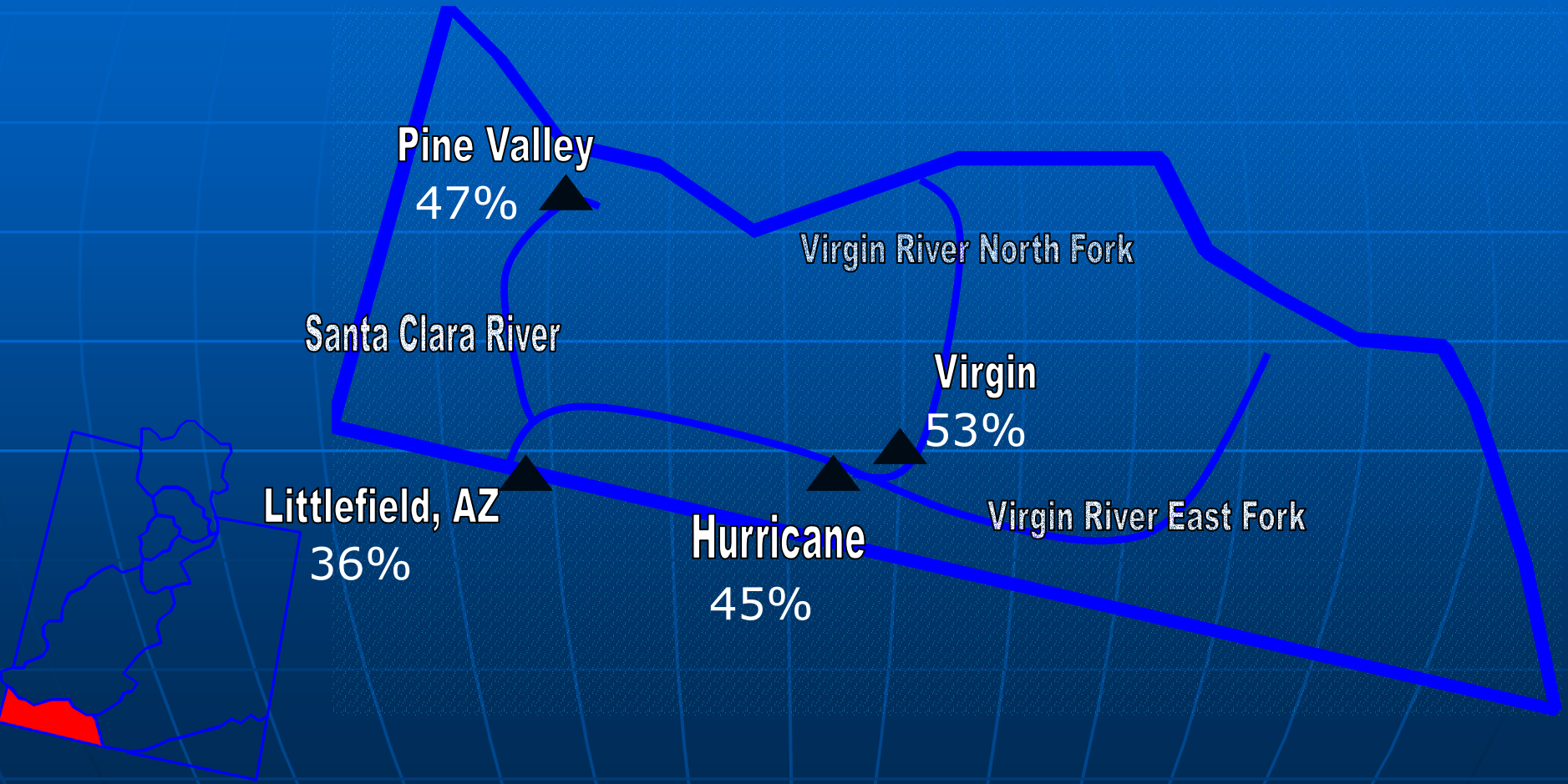
February 1st 2003
April Through July Volume Forecast
Percent of 30 Year Average Flows
Sevier River Basin





Forecasted Utah Spring Snowmelt Runoff Volume

February 1st 2003
April Through July Volume Forecast
Percent of 30 Year Average Flows
Virgin River Basin



Current El Nino Anomalies

- El Nino is currently in mature phase with anomaly at 1.5 – 2.0 degrees
- Expected to weaken as winter progresses
- Signature not that strong

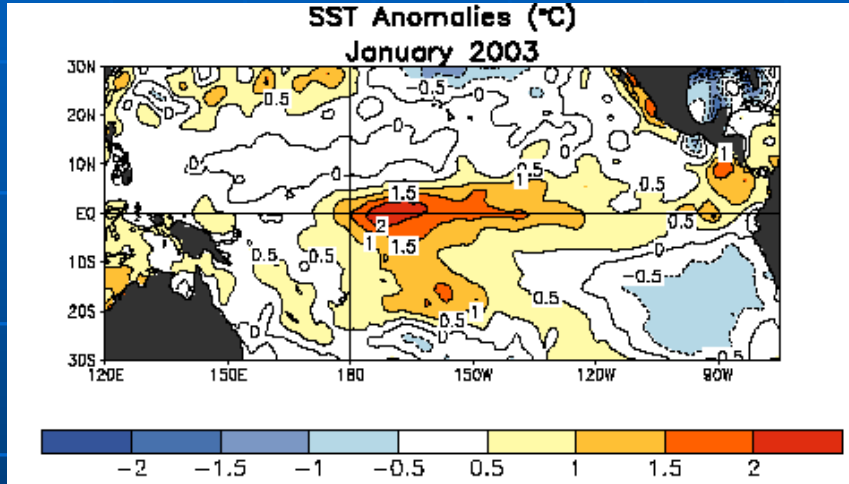
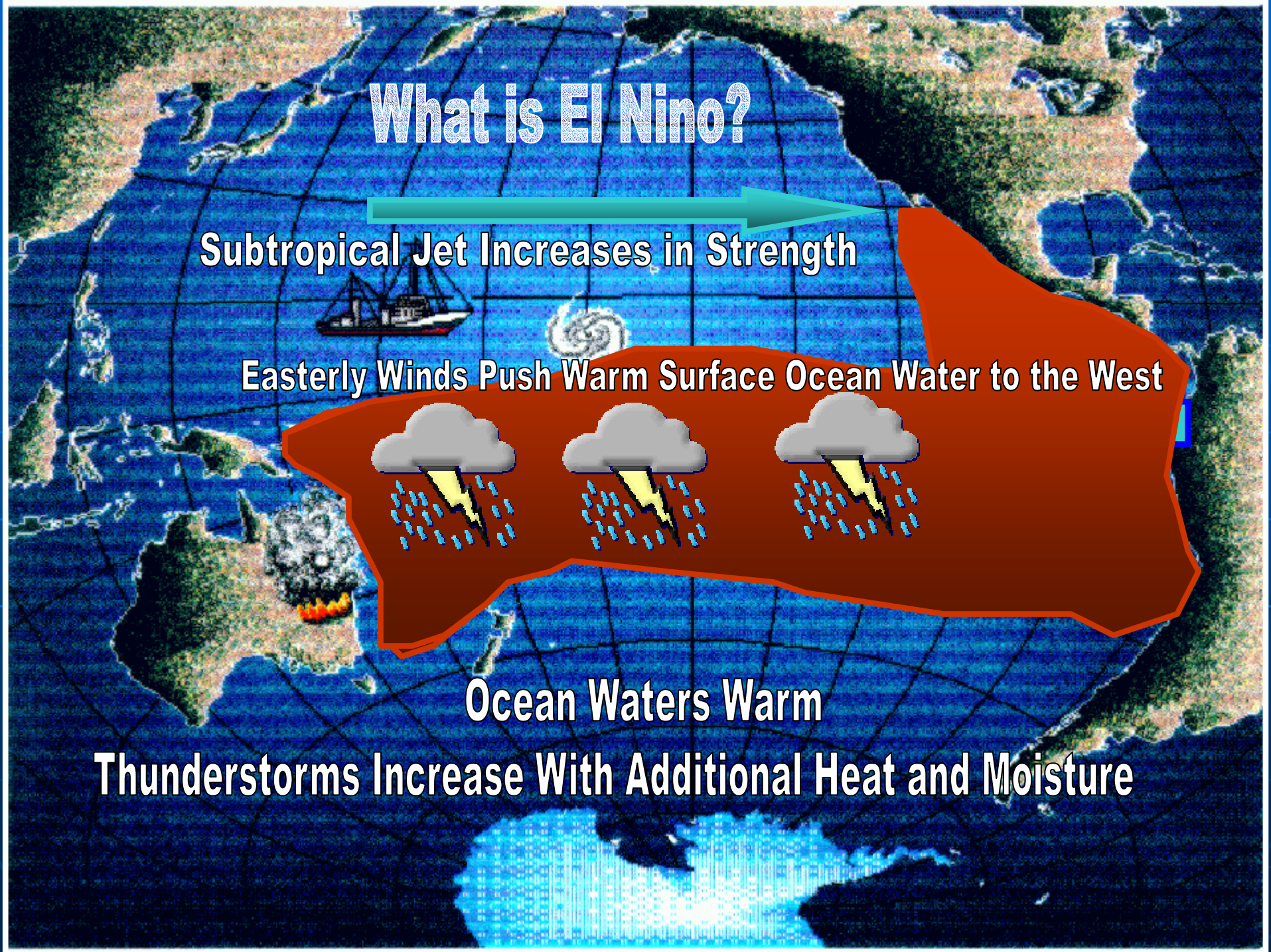
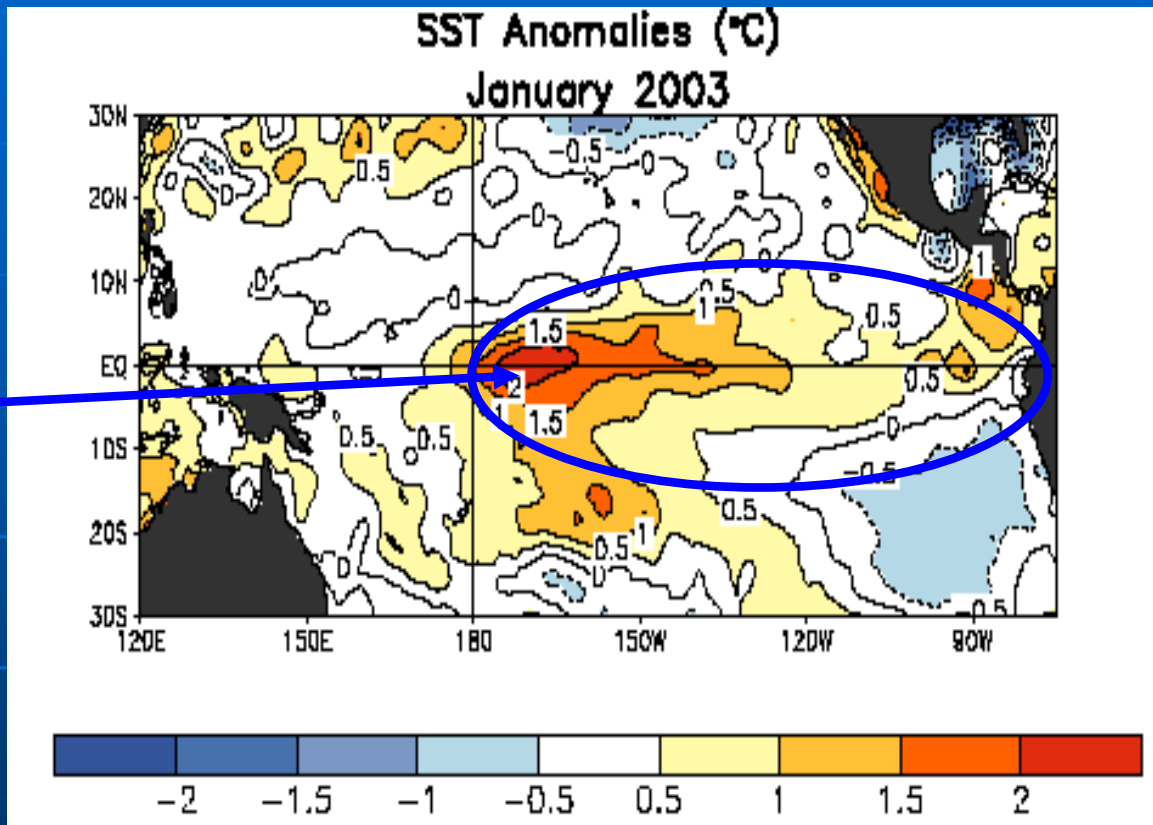


Figure 1. Sea surface temperature (SST) anomalies during January 2003. Departures from average (anomalies) are computed based on the 1971-2000 base period means. Units are °C. (Analysis obtained from the NCEP/Ocean Data Assimilation system that incorporates NOAA/PMEL TAO buoy data, NOAA/AVHRR satellite data and ships of opportunity.)


What is El Nino?
Subtropical Jet Increases in Strength
Easterly Winds Push Warm Surface Ocean Water to the West
Ocean Waters Warm
Thunderstorms Increase With Additional Heat and Moisture

Why are we still dry?

- 2003 El Nino was mild event
- Ocean waters warmed near date line and did not extend across to South American Coast
- As a result, ridge of high pressure dominated Utah's early winter pattern



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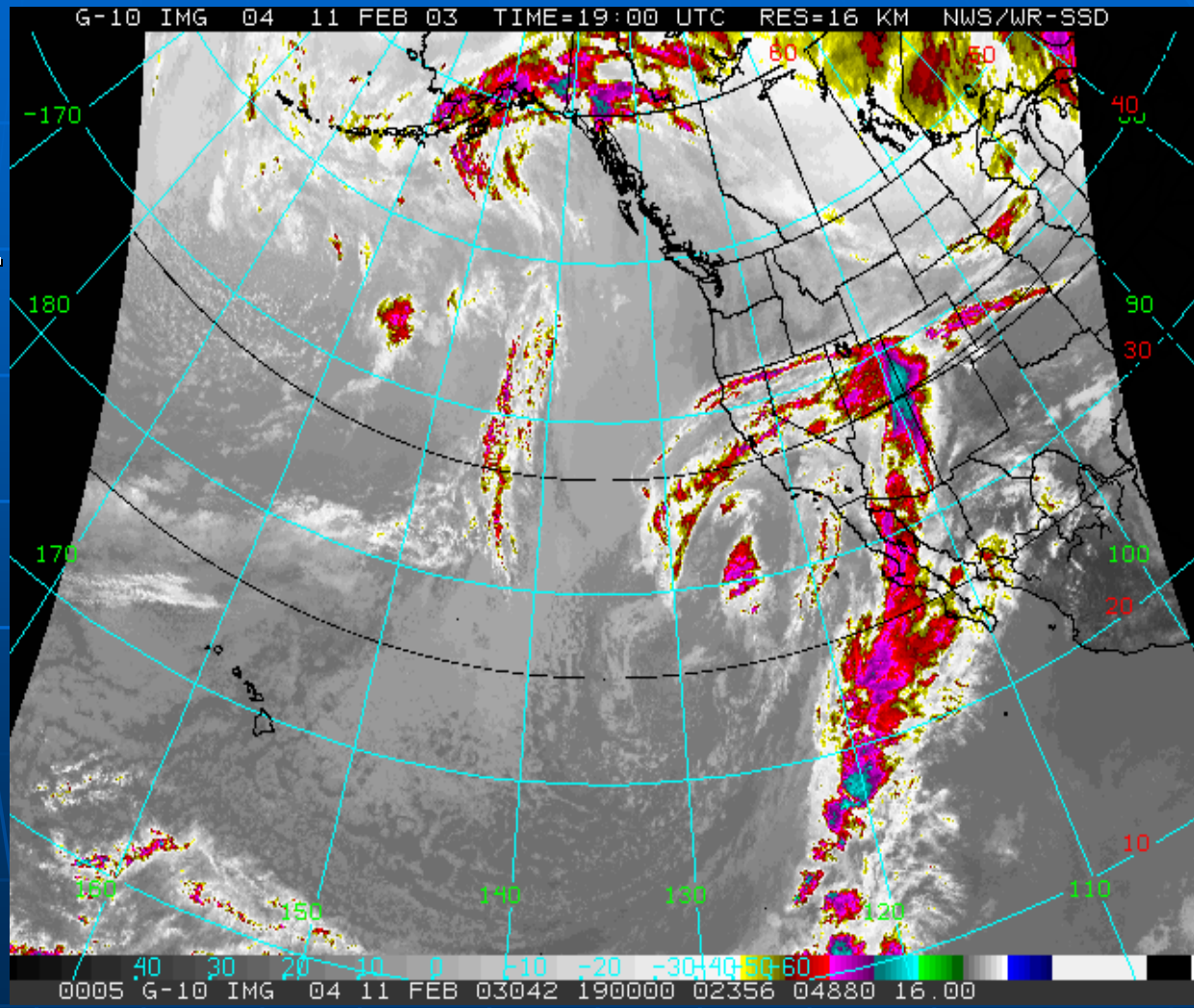
What's in store for the future?

- El Nino will be over by the summer
- El Nino not expected to return for another four years, possibly 2006
- Normal to dry conditions anticipated during the next period

Short Term Weather Forecast

- Continued wet Cycle
- Snow level at 7500 ft.



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Additional Information

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